

Mineral Industry Surveys

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IRON ORE IN JUNE 2006

U.S. mine production of iron ore in June 2006, on a daily average basis, was 3% less than that of the prior month, according to the U.S. Geological Survey. Average daily production, at 148,000 metric tons per day (t/d), was almost 5,000 t/d less than that of May 2006.

Average daily shipments in June 2006, at 171,000 t/d, were 5% greater than those of May. Mine stocks at the end of June were 667,000 metric tons (t) less than those on May 31, a 6% decrease.

U.S. imports of iron ore in May 2006 were 5% less than exports, with exports exceeding imports by 52,000 t.

Exploration and Development Update.—China's Kunming Iron & Steel Group Co. reported that it was negotiating with the Government of Vietnam to open an iron ore mine in Vietnam. Its steel unit, KISCO, indicated that, if successful, it would import 1.5 million metric tons per year or 15% of its ore requirements from the mine, located 60 kilometers from the Yunnan border, by 2008. KISCO also was considering building a 500,000-metric-ton-per-year steel plant in Vietnam in a later project stage (McMahon, 2006).

World Production.—Rio Tinto plc (Australia) announced first half production for 2006. Rio Tinto's share of saleable quantities of iron ore plus pellets were as follows (Australia, unless otherwise specified): Channar (60%-owned), 2.7 million metric tons (Mt); Corumba, Brazil, 0.9 Mt; Eastern Range, 3.8 Mt; Hamersley, 36.9 Mt; Iron Ore Company of Canada (59%-owned), 4.5 Mt; and Robe River (53%-owned), 13.2 Mt. Thus, Rio Tinto's share of total mine production from these operations for the first half of 2006 was 62.0 Mt compared with full year production of 124.5 Mt in 2005 (Rio Tinto plc, 2006§¹).

BHP Billiton Limited (BHPB) announced first half production figures for 2006. BHPB's share of saleable quantities of iron ore (wet) were as follows (Australia, unless otherwise specified): Area C Joint Venture (JV) (85%-owned), 8.7 Mt; Goldsworthy JV (85%-owned), 3.2 Mt; Jimblebar (85%), 3.2 Mt; Mt. Newman JV (85%-owned), 12.4 Mt; Samarco, Brazil, (50%-owned), 3.8 Mt; and Yandi JV (85%-owned), 17.4 Mt. Thus, BHPB's share of total mine production

from these operations for the first half of 2006 was 48.6 Mt compared with full year production of 97.5 Mt in 2005. The ramp-up of several expansion projects at the Western Australia Iron Ore operations was offset somewhat by weather-related impacts in the first quarter of 2006 (BHP Billiton Limited, 2006§).

In the first half of 2006, Brazil's Companhia Vale do Rio Doce (CVRD) reported record iron ore production of 129.8 Mt, an increase of 12.5% compared with that of the same period in 2005, but pellet production fell to 17.6 Mt, a decrease of 11.8% comparing the same periods. Reduced pellet production was due to a shutdown at the São Luis pellet plant and sale of CVRD's share of Gulf Industrial Investment Company, a Bahrain-based pellet producer (Companhia Vale do Rio Doce, 2006§).

Domestic Production.—Cleveland-Cliffs Inc announced production figures for the first half of 2006 for their North American operations. Mine production was, as follows (United States, unless otherwise specified): Empire, 2.4 Mt; Hibbing Taconite, 4.2 Mt; Northshore, 2.5 Mt; Tilden, 3.5 Mt; United Taconite, 2.4 Mt; and Wabush (Canada), 1.8 Mt. Cliffs' share of this total production, 16.8 Mt, was 10.7 Mt. Wabush Mine's lower production reflected pit dewatering difficulties, while Tilden experienced greater than expected repair downtime in the second quarter (Cleveland-Cliffs Inc., 2006§).

Reference Cited

McMahon, Denis, 2006, China steel mills seek more suppliers: Wall Street Journal, July 26, p. B2B.

Internet References Cited

BHP Billiton Limited, 2006 (July 25), BHP Billiton production report for the quarter ended 30 June 2006, accessed July 27, 2006, via URL <http://www.bhpbilliton.com>.

Cleveland-Cliffs Inc., 2006 (July 26), Cleveland-Cliffs reports 2006 second-quarter and first-half financial results, accessed July 27, 2006, via URL <http://www.cleveland-cliffs.com>.

Companhia Vale do Rio Doce, 2006 (August 2), CVRD production report – 2Q06, accessed August 8, 2006, at URL http://www.cvr.com.br/cvr_us/media/PREPORT2T06i.pdf.

Rio Tinto plc, 2006 (July 19), Second quarter 2006 operations review, accessed July 27, 2006, via URL <http://www.riotinto.com>.

¹References that include a section mark (§) are found in the Internet References Cited section.

TABLE 1
U.S. PRODUCTION AND SHIPMENTS OF IRON ORE^{1,2}
(Exclusive of ore containing 5% or more of manganese)

(Thousand metric tons)

Period	Production		Shipments	
	Monthly	Year to date	Monthly	Year to date
2005:				
June	4,480	26,500	4,840	22,100
July	5,160	31,600	5,110	27,200
August	4,840	36,500	5,020	32,200
September	4,460	40,900	5,150	37,400
October	4,480	45,400	5,190	42,600
November	4,740	50,200	4,330	46,900
December	4,380	54,500	4,880	51,800
2006:				
January	4,600	4,600	3,600	3,600
February	3,820	8,420	953	4,550
March	4,600	13,000	2,330	6,880
April	4,220	17,200	5,020	11,900
May	4,750	22,000	5,020	16,900
June	4,450	26,400	5,120	22,000

¹Data are rounded to no more than three significant digits.

²Excludes byproduct ores.

TABLE 2
U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF IRON ORE IN JUNE^{1,2}

(Thousand metric tons)

State	Production		Shipments ³		Stocks ⁴	
	2006	2005	2006	2005	2006	2005
Michigan	950	1,150	1,160	1,280	2,510	2,010
Minnesota	3,500	3,330	3,950	3,550	7,630	5,360
Total	4,450	4,480	5,120	4,840	10,100	7,370

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Excludes byproduct ore.

³Includes rail and vessel.

⁴Includes usable (marketable) material at mines, concentrators, pelletizing plants, and loading docks. Excludes stocks of crude ore at mine and concentrates at agglomerating complexes.

TABLE 3
CANADA: SHIPMENTS OF IRON ORE^{1,2}

(Thousand dry metric tons)

Period	Newfoundland and Labrador	Quebec	British Columbia	Total
2005:				
May	1,940	588	10	2,540
June	1,620	399	8	2,030
July	1,500	1,050	7	2,550
August	1,430	708	10	2,150
September	1,800	1,160	9	2,960
October	2,000	927	10	2,930
November	1,920	1,320	10	3,250
December	1,900	1,130	9	3,040
Year total	19,100	10,900	106	30,100
2006:				
January	1,010	705	10	1,720
February	951	730	10	1,690
March	1,210	730	7	1,950
April	1,840	1,170	8	3,030
May	1,670	1,610	12	3,280

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes production from steel plant waste oxides.

Source: Natural Resources Canada.

TABLE 4
PRODUCTION OF PIG IRON AND RAW STEEL IN THE UNITED STATES, BY TYPE OF FURNACE¹

(Thousand metric tons)

Period	Pig iron production, blast furnace		Raw steel production			
	Monthly	Year to date	Basic oxygen furnace ²		Electric furnace	
			Monthly	Year to date	Monthly	Year to date
2005:						
May	3,080	16,500	3,430	18,600	4,320	21,200
June	2,690	19,200	3,000	21,600	4,110	25,300
July	2,630	21,800	2,920	24,500	4,210	29,500
August	2,890	24,700	3,180	27,700	4,370	33,900
September	2,840	27,500	3,330	31,000	4,440	38,400
October	2,940	30,500	3,470	34,500	4,810	43,200
November	3,000	33,500	3,170	37,700	4,660	47,800
December	2,840	36,300	3,380	41,000	4,420	52,300
2006:						
January	3,190	3,190	3,560	3,560	4,530	4,530
February	3,100	6,300	3,470	7,030	4,250	8,780
March	3,420	9,710	3,800	10,800	5,070	13,900
April	3,280	13,000	3,640	14,500	4,870	18,700
May	3,460	16,500	3,850	18,300	5,060	23,800

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Raw steel production figures for the basic oxygen process are usually greater than the corresponding pig iron production figures because scrap is routinely melted in the basic oxygen furnace together with the molten pig iron.

Source: American Iron and Steel Institute.

TABLE 5
U.S. EXPORTS OF IRON ORE, BY COUNTRY OF DESTINATION AND TYPE^{1,2}

(Thousand metric tons)

Country of destination and type of product	2005		2006			
	4th quarter	Total	March	1st quarter	April	May
Canada	2,560	11,200	224	998	579	966
China	86	282	--	--	52	47
Mexico	27	30	12	13	(3)	11
Slovakia	--	237	--	--	--	--
Trinidad and Tobago	--	(3)	--	--	--	--
United Kingdom	78	78	--	--	--	--
Other	3	8	(3)	2	(3)	4
Total	2,760	11,800	236	1,010	631	1,030
Pellets	2,670	11,600	155	925	628	972
Concentrates	80	89	1	2	(3)	52
Direct shipping ores	5	60	1	2	1	3
Other	6	11	79	83	2	2
Total	2,760	11,800	236	1,010	631	1,030

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes agglomerates.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE^{1,2}
(Exclusive of ore containing 20% or more manganese)

Country of origin and type of product	2006					2005
	May		Year to date			January-May
	Thousand metric tons	Value ³ (thousand dollars)	Thousand metric tons	Value ³ (thousand dollars)	Value ³ (dollars per ton)	Thousand metric tons
Australia	--	--	8	135	18.00	--
Brazil	326	12,100	1,730	83,200	47.99	1,910
Canada	604	31,300	2,080	120,000	57.63	1,980
Chile	46	2,060	142	6,330	44.58	172
China	--	--	--	--	--	(4)
Finland	--	--	3	106	35.24	6
Greece	--	--	15	386	25.00	13
Mexico	--	--	6	141	25.00	6
Paraguay	--	--	--	--	--	4
Peru	--	--	38	1,200	31.44	18
Russia	--	--	--	--	--	99
Spain	--	--	--	--	--	1
Sweden	(4)	6	(4)	6	342.88	--
Trinidad and Tobago	--	--	284	5,900	20.80	375
Venezuela	--	--	--	--	--	87
Total	976	45,500	4,310	217,000	50.42	4,670
Concentrates	223	7,170	890	30,900	34.75	290
Coarse ores	--	--	--	--	--	21
Fine ores	247	9,220	1,420	57,700	40.66	1,730
Pellets	506	29,100	1,990	129,000	64.46	2,560
Other agglomerates	--	--	6	141	25.00	62
Roasted pyrites	--	--	3	106	35.24	3
Total	976	45,500	4,310	217,000	50.42	4,670

-- Zero.

¹Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

²Includes agglomerates.

³Customs value. Excludes international freight and insurance charges.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN MAY 2006^{1,2}
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Country of origin	Type of product						Total
	Concentrates	Coarse ores	Fine ores	Pellets	Briquettes and other agglomerates	Roasted pyrites	
Brazil	79	--	247	--	--	--	326
Canada	98	--	(3)	506	--	--	604
Chile	46	--	--	--	--	--	46
Sweden	(3)	--	--	--	--	--	(3)
Total	223	--	247	506	--	--	976

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes agglomerates.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY COUNTRY¹

Country of origin	2006					2005
	May		Year to date			January-May
	Thousand metric tons	Value ² (thousand dollars)	Thousand metric tons	Value ² (thousand dollars)	Value ² (dollars per ton)	Thousand metric tons
Brazil	--	--	640	41,100	64.18	1,220
Canada	506	29,100	1,350	87,500	64.59	1,240
Russia	--	--	--	--	--	99
Total	506	29,100	1,990	129,000	64.46	2,560

-- Zero.

¹Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

²Customs value. Excludes international freight and insurance charges.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE,
BY CUSTOMS DISTRICT^{1,2}
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Customs district (code no.)	May	January-May	
	2006	2006	2005
Baltimore, MD (13)	292	1,640	1,290
Buffalo, NY (09)	(3)	(3)	6
Charleston, SC (16)	(3)	(3)	--
Chicago, IL (39)	204	394	268
Cleveland, OH (41)	408	708	580
Detroit, MI (38)	25	77	53
Houston-Galveston, TX (53)	--	15	36
Los Angeles, CA (27)	--	--	(3)
Mobile, AL (19)	--	5	61
New Orleans, LA (20)	46	1,450	2,360
Nogales, AZ (26)	--	13	6
Ogdensburg, NY (07)	--	(3)	--
Philadelphia, PA (11)	--	3	3
San Francisco, CA (28)	--	--	4
San Juan, PR (49)	--	--	6
St. Louis, MO (45)	--	(3)	--
Total	976	4,310	4,670

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes agglomerates.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10
U.S. IMPORTS FOR CONSUMPTION OF PELLETS,
BY CUSTOMS DISTRICT¹

(Thousand metric tons)

Customs district (code no.)	May	January-May	
	2006	2006	2005
Baltimore, MD (13)	72	641	655
Chicago, IL (39)	--	--	53
Cleveland, OH (41)	408	708	579
Detroit, MI (38)	25	77	53
Houston-Galveston, TX (53)	--	--	36
Mobile, AL (19)	--	--	61
New Orleans, LA (20)	--	569	1,130
Total	506	1,990	2,560

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.